

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number
WO 2004/083108 A1

(51) International Patent Classification⁷: **B81B 1/00**

(SE). LINDMAN, Susanna [SE/SE]; Nântuna Backe 49,
S-757 59 Uppsala (SE).

(21) International Application Number:

PCT/SE2004/000440

(74) Agent: **BERGANDER, Håkan**; Uppsala Science Park,
S-751 83 Uppsala (SE).

(22) International Filing Date: 23 March 2004 (23.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0300823-2	23 March 2003 (23.03.2003)	SE
60/466,376	29 April 2003 (29.04.2003)	US

(71) Applicant (for all designated States except US): **GYROS AB** [SE/SE]; Uppsala Science Park, S-751 83 Uppsala (SE).

(72) Inventors; and

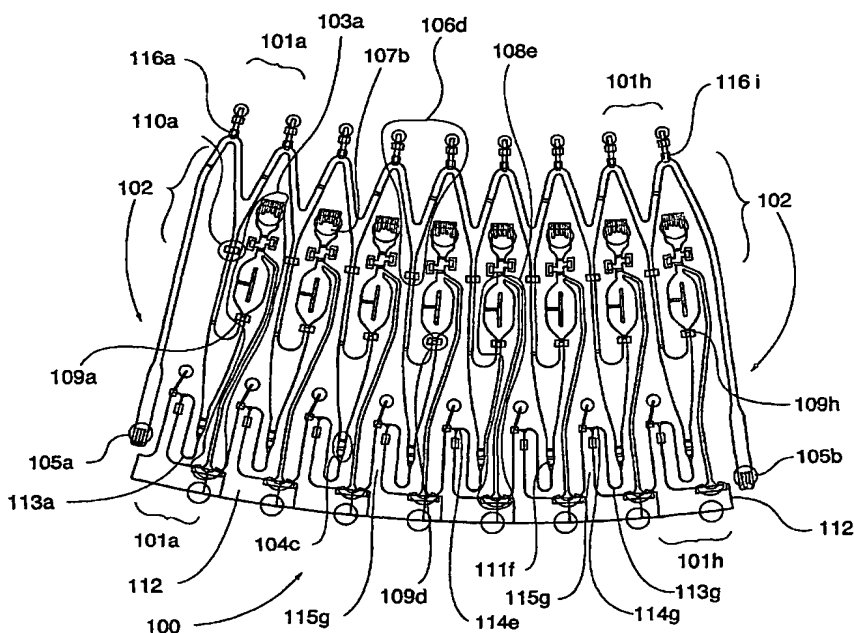
(75) Inventors/Applicants (for US only): **INGANÄS, Mats** [SE/SE]; Lapplandsresan 14, S-757 55 Uppsala (SE). **DERAND, Helene** [SE/SE]; Enstavägen 33, S-752 63 Täby

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: PRELOADED MICROSCALE DEVICES



(57) Abstract: A microfluidic device comprising one, two or more microchannel structures (101a-h), each of which comprises a reaction microcavity (104a-h) intended for retaining a solid phase material in the form of a wet porous bed. Each of said one, two or more microchannel structures comprises the solid phase material in a dry state together with a bed-preserving agent comprising one or more compounds having bed-preserving activity.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*